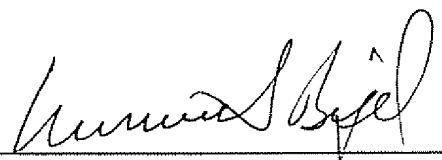


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PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		5308-311	
I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent and Trademark Office on June 5, 2006. Signature <u><i>Susan E. Freedman</i></u> Typed or printed name <u>Susan E. Freedman</u>		Application Number	Filed
		10/659,108	09/09/2003
		First Named Inventor	
		Gerald H. Negley	
		Art Unit	Examiner
		2814	Thao X. Le
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
<input type="checkbox"/> applicant/inventor.		Signature	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		Mitchell S. Bigel	
		Typed or printed name	
<input checked="" type="checkbox"/> attorney or agent of record.		919-854-1400	
Registration number <u>29,614</u>		Telephone number	
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.		June 5, 2006	
Registration number if acting under 37 CFR 1.34 _____		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2814**

Attorney Docket No. 5308-311

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Gerald H. Negley et al.
Application Serial No.: 10/659,108
Filed: September 9, 2003

Confirmation No.: 4336
Group Art Unit: 2814
Examiner: Thao X. Le

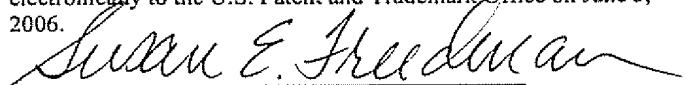
For: SOLID METAL BLOCK MOUNTING SUBSTRATES FOR SEMICONDUCTOR
LIGHT EMITTING DEVICES

June 5, 2006

Mail Stop AF
Commissioner for Patents
Box 1450
Alexandria, VA 22313-1450

**CERTIFICATION OF ELECTRONIC TRANSMISSION
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2006.


Susan E. Freedman
Date of Signature: June 5, 2006

**REASONS IN SUPPORT OF APPLICANTS'
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

This document is submitted in support of the Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG of July 12, 2005 for the New Appeal Brief Conference Pilot Program.

No fee or extension of time is believed due for this request. However, if any fee or extension of time for this request is required, Applicants request that this be considered a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

REMARKS

Applicants hereby request a Pre-Appeal Brief Review (hereinafter "Request") of the claims finally rejected in the final Office Action mailed May 10, 2006. Claims 33-38 stand rejected under 35 USC §102(e) over U.S. Patent 6,531,328 to Chen, and remaining Claims 3, 5, 9-15, 17-20, 29-32 and 39-44 stand rejected under 35 USC §103(a) over Chen in view of U.S. Published Patent Application 2004/0041757 to Yang et al. Applicants respectfully submit that the primary reference Chen discloses conductors that go through a block, but does not describe or suggest conductors that go around the side of the block, as recited in independent Claims 3, 15 and 33 of the present application. Moreover, Chen also describes through holes that extend from the floor of a cavity in a block, through the block, but does not describe or suggest conductors that extend across the block outside the cavity, as recited in independent Claims 9, 18 and 39 of the present application. The secondary reference Yang et al. is silent on these matters. Since one or more essential elements needed for a *prima facie* rejection are simply not present in the references, Applicants respectfully request review of the present application by an Appeal Conference prior to the filing of an Appeal Brief. In the interest of brevity, and without waiving the right to argue additional grounds should this Request be denied, Applicants will merely point out the Examiner's omissions of one or more essential elements need for a *prima facie* rejection.

Pending independent device Claim 3 recites:

3. A mounting substrate for a semiconductor light emitting device comprising:

a solid aluminum block including a cavity in a first face thereof that is configured for mounting the semiconductor light emitting device therein;

a conformal insulating coating comprising aluminum oxide on a surface of the solid aluminum block, and in the cavity; and

first and second spaced apart conductive traces on the conformal insulating coating in the cavity that are configured for connection to the semiconductor light emitting device;

wherein the first and second spaced apart conductive traces extend from the cavity to the first face, around at least one side of the aluminum block and onto a second face of the aluminum block that is opposite the first face. (Emphasis added.)

Remaining independent Claims 15 and 33 also contain the above-underlined "around at least one side" recitation. Figure 1H of the present application, reproduced below, illustrates a representative embodiment of Claims 3, 15 and 33, wherein first and second conductive traces **130a'**, **130b'** extend from the first (top) face **100a** of the block **100** around at least one

side **100c** and to the second (bottom) face **100b**. The large arrows in this copy of Figure 1H illustrate that the traces extend around the side **100c** of the block **100**.

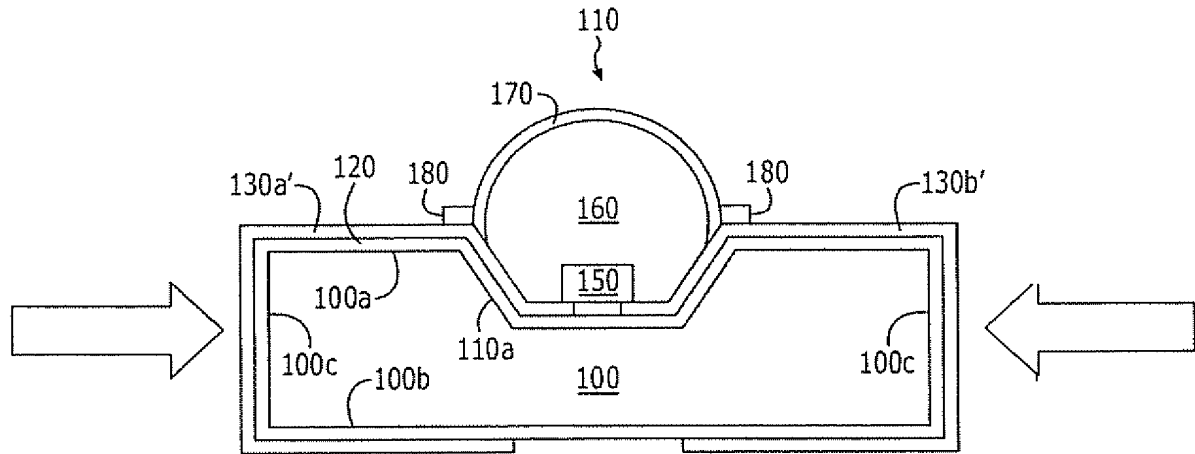


FIG. 1H

In sharp contrast, Chen Figure 18, reproduced below, shows conductors going through the block **8**. The sides of the block **8** are clearly illustrated, but the conductors do not extend around the sides.

The final Official Action, at the last three lines of Page 2, states:

...around at least one side (the side is the left and right vertical portions connects [sic] to the bottom surface) of the block **8** and onto a second face (bottom) of the block **8** that is opposite the first face, fig. 18. (Emphasis added.)

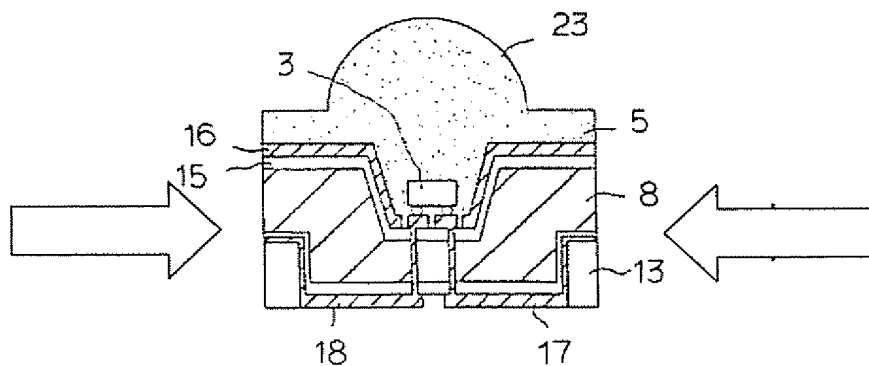


FIG. 18

However, the left and right vertical portions of the block **8** shown by the large arrows in this copy of Figure 18 of Chen, do not have a conductor thereon. The conductor of Chen extends

through the interior of the block 8, but not around the side, and Yang is silent on these matters. For at least these reasons, a *prima facie* case of anticipation/obviousness has not been made as to Claims 3, 15 and 33.

Independent Claim 9 recites:

9. A mounting substrate for a semiconductor light emitting device comprising:

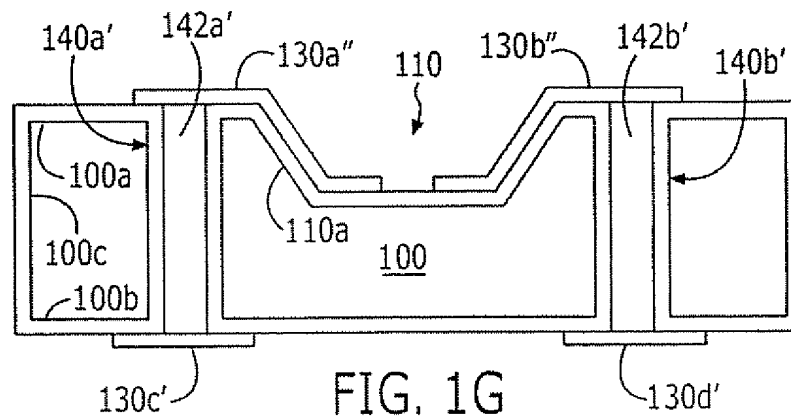
a solid aluminum block including a cavity in a first face thereof that is configured for mounting the semiconductor light emitting device therein;

a conformal insulating coating comprising aluminum oxide on a surface of the solid aluminum block, and in the cavity; and

first and second spaced apart conductive traces on the conformal insulating coating in the cavity that are configured for connection to the semiconductor light emitting device;

wherein the solid aluminum block includes therein first and second through holes that extend from the first face outside the cavity to a second face of the solid aluminum block that is opposite the first face, the respective first and second through holes including the conformal insulating coating thereon that comprises aluminum oxide and a respective first and second conductive via therein that extends from the first face outside the cavity to the second face and wherein a respective one of the spaced apart conductive traces is electrically connected to a respective one of the conductive vias. (Emphasis added.)

The recitation of "through holes that extend from the first face outside the cavity to a second face" is also included in independent Claims 18 and 39. Figure 1G of the present application, reproduced below, illustrates a representative embodiment of Claims 9, 18 and 39. As shown in Figure 1G, the through holes **140a'**, **140b'** extend from the first (top) face **100a** outside the cavity **110** to the second (bottom) face **100b** of the block **100**.



In sharp contrast, Chen Figure 18, which was already reproduced above, illustrates through holes that extend from the first (top) face inside the cavity to the second (bottom) face of the block 8. Stated differently, Chen's through holes extend from the floor of the cavity to the second face, rather than from the first face outside the cavity to the second face as recited in Claims 9, 18 and 39.

In the sentence bridging Pages 5 and 6, the Official Action states:

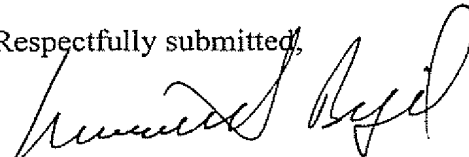
...wherein the solid substrate block 8 includes therein first and second through holes 14, column 4 line 58 that extend from the first face outside the cavity (the holes 14 are below the cavity; thus they are outside the cavity) to a second face (bottom) of the solid block 8 that is opposite the first face.... (Emphasis added.)

However, the fact that the through holes of Chen are below the cavity does not describe or suggest that the through holes extend from the first face outside the cavity to the second face. Moreover, Yang is silent on these matters. For at least these reasons, a *prima facie* case of obviousness has not been made as to independent Claims 9, 18 and 39.

The dependent claims are patentable at least per the patentability of the independent claims from which they depend. This separate patentability of the dependent claims will not be addressed detail herein, for the sake of brevity, but will be addressed separately in an Appeal Brief, if necessary.

Accordingly, for at least the reasons discussed above, a *prima facie* case of anticipation/obviousness has not been met, because recitations of the independent claims are simply not described or suggested in the reference. Therefore, Applicants respectfully request that the present application be reviewed and reversed by the appeal conference prior to the filing of an Appeal Brief.

Respectfully submitted,



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